From: Houlihan, Damien

To: Papadopoulos, George; gerald.szal@state.ma.us; catherine.vakalopoulos@massmail.state.ma.us; Nagle, John

Cc: <u>Gaito, Danielle; Webster, David</u>

Subject: RE: Mount Tom - 316(A) and temperature issues

**Date:** Tuesday, April 09, 2013 7:44:00 AM

## April 23 or 25 will work for me. Thanks.

## Damien

From: Papadopoulos, George

Sent: Monday, April 08, 2013 1:04 PM

To: gerald.szal@state.ma.us; catherine.vakalopoulos@massmail.state.ma.us; Nagle, John

**Cc:** Houlihan, Damien; Gaito, Danielle; Webster, David **Subject:** Mount Tom - 316(A) and temperature issues

Folks,

I was hoping we could meet or set up a conference call to discuss thermal issues regarding Mount Tom Station (MTS) some time during the weeks of April 15<sup>th</sup> or 22nd. Let me know when you are available.

The current daily max limit of 133.2 assumes the use of the 2 recirculating pumps and 1 of the 2 river pumps. When questioned about one DMR flow value of 136.8 MGD (July 2010) MTS says they used both river water pumps during a period of that month due to high intake temperatures, resulting in a permit violation of the daily max limit. In their 2/27/13 submittal, MTS asked that this reissuance consider allowing MTS to use 2 river pumps, instead of one, during the summer months to enhance operations (reduce bearing cooling temperatures) and to stay within the delta T limit of 20 F during 2 pump operation. It would seem they would need this extra flow on certain days between June 15 and Sept 15, but mainly during July and August. From our meeting with MTS, it was noted from a 2009-10 entrainment report that ichthyoplankton levels for sturgeon were highest during a 3 week period from late May to mid-June.

We need to discuss whether to allow for this extra flow only during a limited period, which would include an anti-degradation review. Alternatively, we could maintain the current daily max limit and acknowledge that there may be occasional violations during the summer and/or consider increasing the delta T of 20F if warranted. Based on the thermal modeling the permittee conducted, my impression was that we have some leeway to grant some relief on the delta T (during two pump operation) which could result in MTS not needing to run the second river water pump during the hottest days and violating their flow limit. In addition, are we going to use this latest thermal modeling effort as a rationale that State WQS are being met (i.e. bank to bank impacts)?

John/Gerry, please also have a status of where we stand regarding our consultation with NMFS on sturgeon and whether we have any summary of impingement and entrainment studies conducted by the permittee?

Thanks